Amendments to the Specification

Please replace the paragraph [0003] beginning at page 2, line 6 with the following rewritten paragraph:

[0003] As a means for detecting the position and orientation of the medical insertion tool having the above important role, conventionally, an a fluoroscopy has been performed, and also a means performed through injection of a contrast medium has been used. However, this requires not only a skillful technique but also contrivance for decreasing an X-rays exposure amount through means that the number of times for fluoroscopy is limited so as to avoid an ill effect on a human body such as a patient or a person to be operated owing to X-rays exposure, or an operator wears a protector accompanying unpleasantness and difficulty in an operation. Moreover, this only provides a two-dimensional image. So, it has a disadvantage wherein the insertion tool is not easily inserted and operated. Especially, the blood vessel inside a skull is narrow, complicatedly wound and has many branches. So, when it is compared with a cardiac catheter of which technique has been substantially established, a treatment and a medical examination through it are difficult and a time-consuming work. Moreover, it should be avoided to expose the head to X-rays. Taking the above circumstances into consideration, it is desired to provide a new method for detecting a position and an orientation thereof instead of fluoroscopy so as to decrease the number of times for fluoroscopy.